Amended Claims With Mark-ups to Show Changes Made

8. (Amended) A drug infusion assembly for microinfusing a drug into the hypothalamus of a patient's brain, comprising:

at least one microinfusion catheter configured to be inserted into the hypothalumus of a patient's brain, each of said at least one microinfusion catheters [for placement in the hypothalamus, each of said at least one microinfusion catheters] having a plurality of drug delivery ports[, each of said plurality of drug delivery ports for delivering] arranged to deliver a drug to a separate site within the hypothalamus[, and each of said plurality of drug delivery ports capable of independent control;

a macrocatheter for housing said at least one microinfusion catheter];

a drug delivery manifold, wherein each of said at least one microinfusion catheters is functionally coupled to said drug delivery manifold;

a drug supply line functionally coupled to said drug delivery manifold; and

a drug reservoir/pump for retaining and pumping a drug, said drug reservoir/pump functionally coupled to said drug supply line.

9. (Amended) The drug infusion assembly as claimed in claim [8] 40, wherein said macrocatheter includes a magnetic unit, said magnetic unit [for] being configured

such that application of an external magnetic field allows for stereotactic placement of said macrocatheter to a specific location within the patient's brain.

10. (Amended) The drug infusion assembly as claimed in claim [8] 40, wherein said macrocatheter includes a magnet located at the distal end of said macrocatheter.

22. (Amended) A method for treating an obesity patient by microinfusing a drug into one or more selected portions of the hypothalamus of [a] the patient, comprising [the steps of]:

[a) obtaining an image of the hypothalamus of the patient;

b) inserting a macrocatheter into the patient's brain adjacent to the hypothalamus, the macrocatheter housing at least one microinfusion catheter, and each of the at least one microinfusion catheters including a plurality of independently controllable drug delivery ports;]

[c)] inserting [the] at least one microinfusion catheter into the hypothalamus, wherein the at least one microinfusion catheter includes at least one drug delivery port configured to deliver a drug to tissue adjacent the delivery port; and

[d) sequentially] infusing a drug from [various members of the plurality of] the at least one drug delivery port [ports on] of the at least one microinfusion catheter into

[corresponding sites of] the hypothalamus [proximate the various members of the plurality of delivery ports;] to control the patient's appetite

[e) monitoring the clinical effect of said step d) in order to determine which of the various members of the plurality of drug delivery ports will provide a useful clinical result; and

f) delivering a drug from those selected members of the plurality of drug delivery ports determined in said step e) to provide a useful clinical result].

23. (Amended) The method for treating an obesity patient according to claim [22] 45, wherein said [step b)] macrocatheter insertion step comprises inserting the macrocatheter via an introducer tube inserted into a burr hole in the patient's cranium.

35. (Amended) A method for treating an obesity patient by infusion of a drug from a drug infusion assembly into the hypothalamus of the patient, the method comprising: [the steps of:

a) obtaining a three dimensional image of a patient's brain, the three dimensional image showing the location of the hypothalamus;

b) inserting a macrocatheter into a zone of the patient's brain, wherein the zone is adjacent to the hypothalamus, wherein the macrocatheter houses at least one

microinfusion catheter, each of the at least one microinfusion catheters having a plurality of drug delivery ports, and each of the plurality of drug delivery ports capable of independently outputting a drug, the drug capable of activating or deactivating neurons in one or more regions of the hypothalamus;]

[c)] inserting [the] at least one microinfusion catheter into a selected first region of the hypothalamus, wherein the at least one microinfusion catheter includes at least one drug delivery port configured to deliver a drug to tissue adjacent the delivery port; and

[d)] infusing a quantity of a drug from the at least one [of the plurality of] drug delivery [ports] port to [at least one neuron of the selected first region of the] the patient's hypothalamus[; and

e) monitoring clinical effects of said step d)].

36. (Amended) The method for treating an obesity patient as claimed in claim [35] 49, further comprising [the steps of]:

[f) after said step e),] reinserting the at least one microinfusion catheter into a selected additional region of the hypothalamus;

[g)] infusing a quantity of the drug from the at least one [of the plurality of] drug delivery port [ports] to [at least one neuron of] the selected additional region of the hypothalamus;

[h)] monitoring clinical effects [of said step g)] caused by infusing the drug; and

[i)] repeating [steps f) through h)] this method until a satisfactory clinical effect is obtained.

37. (Amended) The method for treating an obesity patient as claimed in claim 36, wherein [said step g)] infusing a quantity of the drug comprises adjusting the amount of drug infused from the at least one [of the plurality of] drug delivery [ports] port.

38. (Amended) A method for treating an obesity patient by infusion of a drug from a drug infusion assembly into the hypothalamus of the patient, the method comprising [the steps of]:

[a) obtaining a three dimensional image of a patient's brain, the three dimensional image showing the location of the hypothalamus;]

[b)] forming a burr hole at an appropriate location in the patient's cranium;

[c)] inserting an introducer tube into the burr hole;

[d) introducing a macrocatheter into the introducer tube;

e) under magnetic stereotactic computerized control, inserting the macrocatheter into a zone of the patient's brain, wherein the zone is adjacent to the hypothalamus, wherein the macrocatheter houses at least one microinfusion catheter, each of the at least one microinfusion catheters having a plurality of drug delivery ports, and each of the plurality of drug delivery ports capable of independently outputting a drug, the drug capable of activating or deactivating neurons in one or more regions of the hypothalamus;]

[f)] inserting [the] at least one microinfusion catheter into [a selected first region of] the patient's hypothalamus, wherein the at least one microinfusion catheter includes at least one drug delivery port configured to deliver a drug to tissue adjacent the delivery port;

[g)] infusing a quantity of a drug from the at least one [of the plurality of] drug delivery [ports] port to [at least one neuron of] the patient's [selected first region of the] hypothalamus to control the patient's appetite; [and]

[h)] monitoring clinical effects [of said step g)] caused by infusing the drug;

[i) after said step h),] reinserting the at least one microinfusion catheter into a selected additional region of the patient's hypothalamus;

[j)] infusing a quantity of the drug from the at least one [of the plurality of] drug delivery [ports] port to [at least one neuron of] the selected additional region of the patient's hypothalamus;

[k)] monitoring clinical effects [of said step j)] caused by infusing the drug; and

[l)] repeating [steps i) through k)] the infusing and monitoring until a satisfactory clinical effect is obtained.